Fishery Management Report No. 05-10

North Alaska Peninsula Salmon Management Plan, 2005

by

Robert L. Murphy

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mideye-to-fork	MEF
gram	g	all commonly accepted		mideye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs.,	standard length	SL
kilogram	kg		AM, PM, etc.	total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D.,	Mathematics, statistics	
meter	m		R.N., etc.	all standard mathematical	
milliliter	mL	at	@	signs, symbols and	
millimeter	mm	compass directions:		abbreviations	
		east	E	alternate hypothesis	H_A
Weights and measures (English)		north	N	base of natural logarithm	e
cubic feet per second	ft ³ /s	south	S	catch per unit effort	CPUE
foot	ft	west	W	coefficient of variation	CV
gallon	gal	copyright	©	common test statistics	$(F, t, \chi^2, etc.)$
inch	in	corporate suffixes:		confidence interval	CI
mile	mi	Company	Co.	correlation coefficient	
nautical mile	nmi	Corporation	Corp.	(multiple)	R
ounce	OZ	Incorporated	Inc.	correlation coefficient	
pound	lb	Limited	Ltd.	(simple)	r
quart	qt	District of Columbia	D.C.	covariance	cov
yard	yd	et alii (and others)	et al.	degree (angular)	0
		et cetera (and so forth)	etc.	degrees of freedom	df
Time and temperature		exempli gratia		expected value	E
day	d	(for example)	e.g.	greater than	>
degrees Celsius	°C	Federal Information		greater than or equal to	≥
degrees Fahrenheit	°F	Code	FIC	harvest per unit effort	HPUE
degrees kelvin	K	id est (that is)	i.e.	less than	<
hour	h	latitude or longitude	lat. or long.	less than or equal to	≤
minute	min	monetary symbols		logarithm (natural)	ln
second	S	(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log ₂ , etc.
Physics and chemistry		figures): first three		minute (angular)	,
all atomic symbols		letters	Jan,,Dec	not significant	NS
alternating current	AC	registered trademark	®	null hypothesis	H_{O}
ampere	A	trademark	ТМ	percent	%
calorie	cal	United States		probability	P
direct current	DC	(adjective)	U.S.	probability of a type I error	
hertz	Hz	United States of		(rejection of the null	
horsepower	hp	America (noun)	USA	hypothesis when true)	α
hydrogen ion activity	pН	U.S.C.	United States	probability of a type II error	
(negative log of)	1		Code	(acceptance of the null	
parts per million	ppm	U.S. state	use two-letter	hypothesis when false)	β
parts per thousand	ppt,		abbreviations	second (angular)	
· · · · · · · · · · · · · · · ·	%°		(e.g., AK, WA)	standard deviation	SD
volts	V			standard error	SE
watts	W			variance	
				population	Var
				sample	var
				r	

FISHERY MANAGEMENT REPORT NO. 05-10

NORTH ALASKA PENINSULA SALMON MANAGEMENT PLAN, 2005

by

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March 2005

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ABSTRACT

The 2005 projected North Peninsula salmon harvests are: 7,000 Chinook salmon *Oncorhynchus tshawytscha*, 1,950,000 sockeye salmon *O. nerka*, 50,000 coho salmon *O. kisutch*, 20,000 pink salmon *O. gorbuscha*, and 75,000 chum salmon *O. keta*. The bulk of the salmon harvest is projected to occur in the Northern District from Nelson Lagoon to Strogonof Point. The North Peninsula is predominantly fished by drift gillnet and set gillnet fleets, but in some locations purse seine gear is used. In 2005, salmon enumerating weirs on the Nelson, Bear, Sandy, and Ilnik Rivers will be used to facilitate in-season escapement assessment.

Key words: North Alaska Peninsula, Nelson Lagoon, Bear River, Three Hills, Ilnik, salmon, commercial fisheries management

INTRODUCTION

The purpose of this document is to provide commercial salmon fishermen and buyers with information and guidelines that will be used by the Alaska Department of Fish and Game to manage the commercial salmon fisheries of the North Alaska Peninsula during 2005.

The North Peninsula, a portion of the Alaska Peninsula Management Area, consists of the Northern and Northwestern Districts and encompasses Bering Sea coastal waters from Cape Menshikof west to Cape Sarichef (Figure 1). The Northern District includes all state waters between the westernmost tip of Cape Menshikof and the southernmost tip of Moffet Point, while the Northwestern District includes all state waters between Moffet Point and Cape Sarichef on Unimak Island. Five species of salmon are commercially harvested on the North Peninsula: Chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum salmon *O. keta*.

The Cinder River Section, Inner Port Heiden Section, and Ilnik Lagoon comprise an overlap area described under 5 AAC 39.120 (d) where both Area M (Alaska Peninsula and Aleutian Islands) and Area T (Bristol Bay) permit holders may fish under certain conditions (ADF&G 2004). Area M permit holders may fish anytime during open fishing periods in all of the above locations. Area T permit holders may fish in the Cinder River and Inner Port Heiden Sections from May 1 through June 30, and from August 1 through September 30 during open fishing periods. Area T permit holders may also fish in Ilnik Lagoon beginning August 1 during open fishing periods.

The projected 2005 salmon catch is approximately 2,102,000 fish for the entire North Peninsula of which 7,000 are expected to be Chinook salmon, 1,950,000 sockeye salmon, 50,000 coho salmon, 20,000 pink salmon, and 75,000 chum salmon. The sockeye salmon 2005 projected harvest is 20% below the 2004 harvest, while the projected harvest of other species is directly related to market conditions. The 2005 Nelson River sockeye salmon total run is forecasted to be 497,000 fish (range 277,000-740,000 fish) with a forecasted harvest of 339,000 sockeye salmon. The late Bear River (post July 31) sockeye salmon total run is forecasted to be 448,000 fish (range 100,000-863,000 fish) with a forecasted harvest of 331,000 sockeye salmon (Eggers 2005).

GPS COORDINATES AND ENFORCEMENT

The Alaska Department of Fish and Game (ADF&G) and the Alaska Department of Public Safety use global positioning system (GPS) technology to identify districts, sections, closed waters, and regulatory fishing coordinates published in regulations or emergency orders.

FISHERY ANNOUNCEMENTS

The Northern District will be managed from the Port Moller ADF&G office, while the Northwestern District will be managed from the Cold Bay ADF&G office. Management staff can be reached over VHF channel 72 in Port Moller or VHF channel 6 in Cold Bay and through the following contacts:

Port Moller:

Alaska Dept. of Fish & Game Phone (907) 987-2216 Fax (907) 987-2215 SSB 3.230 MHz

Cold Bay:

Alaska Dept. of Fish & Game Phone (907) 532-2419 Fax (907) 532-2470 SSB 3.230 or 3.260 MHz

Inseason emergency orders and news releases will be made available to the industry and the public by at least one of the following methods:

- Communicated directly to the local buyers/processors and fishermen via fax, email, or verbally.
- Transmitted over one or more of the following radio frequencies: SSB 3.230 MHz and VHF 72 in Port Moller or VHF 6 in Cold Bay.
- News releases will be displayed at several places in Port Moller and at ADF&G offices in Port Moller, Cold Bay and Sand Point.
- In Port Moller and Cold Bay after business hours at the phone number listed above using recorded messages.

The ADF&G will attempt to give a minimum of six hours advance notice of commercial fishing openings when established by emergency order. However, there may be times when less than six hours notice is given for a commercial fishery opening/closures/extension.

CATCH REPORTING

Buyers/processors must report their salmon purchases by location, species (in both numbers of fish and pounds), and number of deliveries, by 9:00 AM the day after delivery to the ADF&G in Port Moller for harvest in the Northern District or Cold Bay for harvests in the Northwestern District.

When purchasing salmon, the buyer must complete fish tickets showing the statistical area where fish were harvested which may be different than the area where the delivery occurred. Fish tickets must be sent to the appropriate ADF&G office in Port Moller or Cold Bay within seven (7) days of the delivery (5 AAC 39.130; ADF&G 2004). The following addresses should be used:

Port Moller:

Alaska Dept. of Fish & Game P.O. Box 163 Port Moller, AK 99571-8999 Phone (907) 987-2216 Fax (907) 987-2215

Cold Bay:

Alaska Dept. of Fish & Game P.O. Box 50 Cold Bay, AK 99571 Phone (907) 532-2419 Fax (907) 532-2470

NORTH PENINSULA MANAGEMENT STRATEGY

The North Peninsula salmon fisheries will be managed on the basis of catch-per-unit-effort (CPUE) abundance indicators, salmon abundance determined during ADF&G test fisheries, and escapement estimated by aerial surveys and weir counts. Scheduled weekly fishing periods during the open season are listed in Table 7 and in the 2004-2007 Commercial Finfish Regulations (ADF&G 2004). When possible, the management of North Peninsula fisheries will take into account processing requirements while maximizing harvest opportunity and ensuring escapement requirements.

NORTHWESTERN DISTRICT

Dublin Bay Section

Commercial salmon fishing periods will occur as scheduled in the 2004-2007 Commercial Finfish Regulations (Table 7).

Urilia Bay Section

The commercial salmon fishing season in the Urilia Bay Section may open by emergency order on June 20 if early season sockeye salmon escapement objectives are met. Christianson Lagoon will be managed based on sockeye salmon abundance and Peterson Lagoon will be managed based on chum salmon abundance through August 31. The entire Urilia Bay Section will be managed based on coho salmon abundance.

Swanson Lagoon Section

Sockeye and chum salmon stocks will be managed based on abundance estimates through August when the section will be managed based on local coho salmon abundance determined from aerial surveys and commercial CPUE data.

Bechevin Bay Section

The Bechevin Bay Section will open concurrently with the Ikatan Bay Section (part of the South Peninsula) during June (5 AAC 09.365). Post June, the Bechevin Bay Section will be managed based on the strength of local chum and pink salmon stocks. Fishing periods throughout the Bechevin Bay Section will be established by emergency order.

Izembek-Moffet Bay Section

Chum salmon are the most abundant species found in this section through August, when coho salmon become the dominant species. Management decisions will be based on aerial escapement surveys and CPUE data. If there is little or no market for chum salmon, and fishermen target

local sockeye salmon producing systems, then management will be based on sockeye salmon run strength to these systems.

NORTHERN DISTRICT

Black Hills Section

During June, the Black Hills Section will be managed based on the strength of local Chinook salmon stocks. Management during July and early August will be based on the abundance of local sockeye salmon runs in the Black Hills Section. During late August and September, the Black Hills Section will be managed based on local coho salmon abundance and harvest effort.

Nelson Lagoon Section

The sockeye salmon escapement goal range for the Nelson (Sapsuk) River system is 97,000-219,000 fish (Nelson et al. *in press*). In 2003-2004, the Alaska Peninsula escapement goals were reviewed and changes to the Nelson River goals were adopted. The lower escapement goal is 97,000 sockeye salmon, the upper goal increased from 150,000 to 219,000 fish.

Table 1.—Nelson River Weir Sockeye Salmon Escapement Interim Objectives.
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Date	Escapement for Period Ending	Cumulative Escapement Objective
June 30	30,000 - 60,000	30,000 - 60,000
July 5	20,000 - 45,000	50,000 - 105,000
July 10	20,000 - 50,000	70,000 - 155,000
July 15	15,000 - 30,000	85,000 - 185,000
July 20	10,000 - 25,000	95,000 - 210,000
July 25	2,000 - 9,000	97,000 – 219,000
Season Total Escapement Goal		97,000 – 219,000

The Nelson Lagoon fishery will be managed based on interim escapement objectives at the Nelson River weir. Commercial salmon fishery harvests will also be used to evaluate run strength.

Escapements may be increased if escapement quality is poor because of a high percentage of netmarked fish, high percentage of jack salmon (age .1), or a low female to male sex ratio. The estimated number of female sockeye salmon in the escapement should range from 50,000 -110,000 fish by July 25.

The escapement goal range for Chinook salmon in the Nelson River system is 2,400-4,400 fish (Nelson et al. *in press*). To provide adequate escapement for Chinook salmon in Nelson Lagoon, fishing periods through June 15 will be limited in duration from 6:00 AM Monday to 12:00 MIDNIGHT Wednesday. From June 16 to June 30 it is anticipated that four fishing days will be allowed each week. Additional fishing time may be allowed if daily sockeye salmon catches are large or cumulative weir counts exceed interim objectives. However, if it is evident in June that the Chinook or sockeye salmon runs are weak, then the number of fishing days will be reduced. The amount of Chinook salmon fishing gear used in the fishery will be considered when evaluating sockeye salmon catches.

During July, fishing time will be dependent upon sockeye salmon escapements and daily catches. If escapement data from the Nelson River weir cannot be determined due to high water events, then daily catch rates (primarily) and daily catch per boat (secondarily) will be used to evaluate run strength.

Beginning August 16, the Nelson Lagoon fishery is managed based on coho salmon run strength. No more than three fishing days will be allowed per week unless coho escapements are expected to exceed escapement objectives or if the fishing effort has minimal impact on achieving adequate escapement.

Herendeen-Moller Bay Section

The Herendeen and Port Moller Bay fishery will be managed based on the abundance of chum and pink salmon stocks. Pink salmon that enter Herendeen Bay (especially during even years) will be harvested in openings established by emergency order after July 20, without jeopardizing local chum salmon stocks. Management will be based on in-season escapement determined by aerial surveys and catch information.

Port Moller Bight Section

The Port Moller Bight Section will be managed based on the status of Bear River sockeye salmon escapement and fishery openings and closures will be concurrent with the Bear River Section.

Bear River and Three Hills Sections

The department will actively manage for the Bear River escapement objective of 261,000 -458,000 sockeye salmon through August 25, when the weir is typically removed for the season. The escapement goal for the early run, June 1 through July 31, is 176,000-293,000 sockeye salmon salmon (Nelson et al. *in press*). The escapement goal for the late run, August 1 through August 25, is 85,000-165,000 sockeye salmon, which includes postweir estimates. The late-run escapement objective is a minimum of 85,000 sockeye salmon from August 1 through August 25. The average post-weir counts of approximately 30,000 sockeye salmon, although not actively managed, are included in the total season ending Bear River escapement goal. The department will manage for the lower escapement objective of all interim and season ending escapement goals at Bear River. The Bear River sockeye salmon escapement goal ranges are divided into historic proportions of the early and late runs to ensure that all components of the Bear River runs receive adequate escapement and the final goal, including post weir count, of 291,000-488,000 sockeye by September 15 is met.

Table 2.—Bear River Sockeye Salmon Escapement Interim Objectives.

	Escapement for	Cumulative Escapement
Date	Period Ending	Objective
Early-Run Component:		
June 15	4,000 - 8,000	4,000 - 8,000
June 20	11,000 - 22,000	15,000 - 30,000
June 25	15,000 - 25,000	30,000 - 55,000
June 30	30,000 - 60,000	60,000 - 115,000
July 5	30,000 - 50,000	90,000 - 165,000
July 10	25,000 - 35,000	115,000 - 200,000
July 15	15,000 - 30,000	130,000 - 230,000
July 20	10,000 - 20,000	140,000 - 250,000
July 25	20,000	160,000 - 270,000
July 31	16,000 -23,000	176,000 - 293,000
Early Run Goal	176,000 - 293,000	
Late-Run Component:		
August 5	15,000 - 30,000 ^a	191,000 - 323,000
August 10	20,000 - 35,000	211,000 - 358,000
August 15	15,000 - 35,000	226,000 - 393,000
August 20	15,000 - 30,000	241,000 - 423,000
August 25	20,000 - 35,000	261,000 - 458,000
Late Run Goal	85,000 - 165,000	
Weir Escapement Goal	261,000 - 458,000	
Post-Weir Estimate	30,000	
Season Ending Goal	291,000 - 488,000	

^a Escapement occurring during the July 26-31 period that results in the escapement to exceed the 20,000 fish escapement objective, will be applied to the late run escapement objective. However, no more than 15,000 fish shall be applied to the late run escapement objective. This will aid the ADF&G in managing the late Bear River sockeye salmon run more effectively when the run is earlier than expected.

If one of the interim escapement objectives (listed above) are not achieved, fishing in the Bear River and Three Hills Sections will be curtailed to reach the cumulative escapement objectives.

The number of jack (length < 400 mm mid eye to fork of tail or age .1) and net-marked sockeye salmon in the Bear River escapement are important when evaluating escapement quality. Typically, the number of jack salmon is less than 10%. If the number of jack salmon, on a daily basis or for the season, is above 10%, the escapement objective may be increased to compensate for the reduction in reproductive potential. If the number of net-marked salmon becomes excessive, the escapement objectives may be increased to preserve escapement quality.

The Sandy River sockeye salmon annual escapement goal is 40,000-60,000 fish (Nelson et al. *in press*) and is estimated using weir counts. If weir counts are unavailable due to difficulties with the weir such as a high water event, aerial survey data will be used to estimate the escapement and manage the fisheries.

Table 3.—Sandy River Sockeye Salmon Escapement Interim Objectives.

	Escapement for	Cumulative
Date	Period Ending	Escapement Objective
June 20	2,000 - 3,000	2,000 - 3,000
June 25	4,000 - 7,000	6,000 - 10,000
June 30	9,000 - 15,000	15,000 - 25,000
July 5	10,000 - 15,000	25,000 - 40,000
July 10	5,000 - 10,000	30,000 - 50,000
July 15	4,000 - 5,000	34,000 - 55,000
July 20	3,000	37,000 - 58,000
July 25	2,000 - 3,000	40,000 - 60,000
Season Total Escapement Goal		40,000 - 60,000

Prior to July 21, the Three Hills Section will be managed based on Bear, Sandy, and Ilnik rivers sockeye salmon abundance. If escapement objectives in Bear or Sandy Rivers are not being met, a portion of the Bear River Section may be closed while the Three Hills Section may remain open. This strategy has been used successfully in the past to achieve escapement objectives while providing fishing opportunity and avoiding escapement surplus. If escapement into Ilnik and/or Ocean River (if Ocean River flows directly into the Bering Sea) is inadequate and area closures in the Ilnik Section are not an effective conservation action, the eastern portion of the Three Hills Section may be closed to provide additional protection for fish needed for escapement.

Table 4.—Sockeye Salmon Stocks Used to Manage Four Sections in the Northern District.

	Sockeye Salmon Stocks		
Section	Pre July 21	Post July 20	
Bear R.	Bear R., Sandy R.	Bear R., Sandy R.	
Three Hills	Bear R., Sandy R., Ilnik R.	Bear R., Sandy R.	
Ilnik	Ilnik R., Meshik R., Bear R.a, Ugashik R.a	Bear R.	
Nelson Lagoon	Nelson R.	Nelson R.	

^a Bear and Ugashik Rivers sockeye salmon will be considered only if a management concern exists for these stocks.

During June, management decisions regarding sockeye salmon may be conservative to protect Chinook salmon stocks in the King Salmon, Bear, and Sandy Rivers. In August and September, management decisions in the Three Hills Section will consider the strength of Ilnik Lagoon coho salmon run.

Ilnik Section

In February 2004, the Alaska Board of Fisheries changed regulations in the Ilnik Section (5 AAC 09.369 (j)). The changes permit fishing in that portion of the Ilnik Section northeast of Unangashak Bluffs to Strogonof Point as early as June 25 based on the escapement levels in Ilnik and Meshik Rivers. Aerial surveys will be used to determine escapement abundance into the Meshik River. The area northeast of Unangashak Bluffs will be managed on Meshik River sockeye salmon run strength unless a management concerns exist for Ilnik River sockeye salmon, then closures northeast of Unangashak Bluffs will occur. In 2004, the first year of the new management plan, a conservative 2½ days of fishing per week was permitted northeast of Unangashak Bluffs to Strogonof Point since the impact of fishing on this area on Meshik River sockeye salmon stocks was unknown. A baseline of inseason aerial survey data was started in 2004. The sockeye salmon escapement at Meshik River in 2004 (82,200 sockeye salmon) was almost five times higher than the upper escapement goal of 10,000-20,000 fish. The total sockeye salmon into systems within the Inner Port Heiden Section during 2004 was 103,700 fish. During 2005, the number of fishing days permitted will be increased to a maximum of 4½ days per week if Meshik and Ilnik river escapements are sufficient.

Management action will be considered in the Ilnik Section if the Bear River sockeye salmon run is not meeting escapement objectives after closures in the Bear River and Three Hills Sections. Prior to July 21, management action will also be taken in the Ilnik Section if closures are implemented in the Egegik District to protect Ugashik River sockeye salmon. If Bear and Ugashik rivers' sockeye salmon runs are expected to meet escapement objectives prior to July 21, fishing time in the Ilnik Section will be based on abundance of Ilnik and Meshik River sockeye salmon. From July 20 to August 15, the Ilnik Section will be managed based on Bear River sockeye salmon abundance.

Table 5.—Ilnik River Sockeye Salmon Escapement Interim Objectives (If Ocean River Flows into Ilnik Lake).

	Escapement for	Cumulative
Date	Period Ending	Escapement Objective
June 15	5,000 - 8,000	5,000 - 8,000
June 20	5,000 - 7,000	10,000 - 15,000
June 25	5,000 - 10,000	15,000 - 25,000
June 30	5,000 - 10,000	20,000 - 35,000
July 5	10,000	30,000 - 45,000
July 10	5,000	35,000 - 50,000
July 15	3,000 - 7,000	38,000 - 57,000
July 20	2,000 - 3,000	40,000 - 60,000
Season Total Escapement Goal		40,000 - 60,000

The sockeye salmon management objective for the Ocean River was based on aerial surveys when the river flowed directly into the Bering Sea (not through Ilnik Lake) in 1972-1975, 1986, and 1987. When this occurred, many of the fish bound for Ocean River did not pass through the Ilnik River, and therefore would not pass the weir. For the years noted above, an average of 20% of the Ilnik River system escapement spawned in Ocean River. If Ocean River flows directly into the Bering Sea during 2005, the Ocean River escapement goal will be subtracted from the Ilnik

River escapement goal. Because of the proximity of the Ocean River terminus to the Three Hills Section, management actions may be taken in the Three Hills Section to meet escapement objectives in Ocean River.

Table 6.—Ocean River Sockeye Salmon Escapement Interim Objectives (Only Needed if Ocean River Flows Directly into the Bering Sea).

Date	Cumulative Number Aerial Survey
June 15	1,000 - 1,600
June 20	2,000 - 3,000
June 25	3,000 - 5,000
July 5	6,000 - 9,000
July 10	7,000 - 10,000
July 15	7,600 - 11,400
July 20	8,000 - 12,000
Season Total	8,000 - 12,000
Escapement Objective	,

From August 15 through September 30, the Ilnik Section will be managed based on Ilnik Lagoon coho salmon run strength. The strength of Unangashak and Ilnik Rivers coho salmon runs, and the amount and distribution of fishing effort will also determine fishing time in the Ilnik Section. Because coho salmon are often harvested incidentally to sockeye salmon, if large scale closures of the Bear River and Three Hills Sections occurs during August and September for concern over late run Bear River sockeye salmon, then the Ilnik Section may also remain closed for conservation of coho salmon.

Inner Port Heiden and Cinder River Sections

The Inner Port Heiden and Cinder River Sections will be managed on the basis of Chinook salmon abundance during May and early June. The weekly fishing periods established in regulation are expected during this period (Table 7). Sockeye salmon abundance during mid June through July and coho salmon abundance after July will dictate fishing time in these sections. Beginning June 25, fishing time permitted in the Ilnik Section located northeast of Unangashak Bluffs will be concurrent with fishing time in the Inner Port Heiden Section unless management concern exists for Ilnik, Bear, or Ugashik Rivers. Area T permit holders may fish in the open waters of these sections during every month except July. Area M permit holders are allowed to fish in the open waters of these sections during May through September. The fishing season in that portion of the Cinder River Section outside of Shagong Lagoon (Cinder River Lagoon) cannot open earlier than August 1 (ADF&G 2004). Fishermen in the Cinder River Section are reminded that the following waters are closed to commercial salmon fishing under 5 AAC 09.350 (ADF&G 2004):

- <u>Cape Menshikof:</u> all waters of the Cinder River Section located north of a line extending 304° from 57° 24.40' N. lat. 158° 03.00' W. long.
- <u>Cinder River Lagoon:</u> all waters enclosed by a line from 57° 20.00' N lat., 158°08.02' W long., to 57° 21.30' N. lat., 158°02.63' W. long.

BEAR RIVER TEST FISHERY

During the 2005 season, the ADF&G may conduct a test fishery in the vicinity of Bear River to assess the marine abundance of sockeye salmon. The main objective of the test fishery is to decrease the likelihood of exceeding the Bear River escapement goal while avoiding large surplus escapements and to maximizing the harvest of surplus salmon into Bear River. The test fishery will occur during commercial fishing closures after build-ups of fish would be expected (usually 3-5 days after a closure). The ADF&G management staff in Port Moller will assess the sockeye salmon abundance after each test fishery. Management decisions will incorporate all information available including; daily catch rates prior to the fishery closure, aerial survey observations, daily escapement estimates, and test fishery results. If salmon build-ups occur in the test fishery area, management actions can include opening the commercial fishery to provide harvest opportunities while providing a closed water area to protect milling Bear River bound sockeye salmon. In the past, the ADF&G has closed areas around Bear River to ensure escapement requirements were achieved while providing a harvest opportunity outside the closed area.

The ADF&G office in Port Moller will establish and maintain a list of permit holders willing to participate in the test fishery program. Enrollment will begin on May 15 and continue until the first test fishing date. Enrollment can be completed in person or by phone. The permit holder must have at least five seasons of experience drift gillnet salmon fishing in the vicinity of Bear River, and each vessel must be able to chill the catch using refrigerated sea water.

All eligible names will be randomly chosen and a sequential list of charter vessels will be announced over the VHF radio and kept available at the ADF&G office in Port Moller. The sequential list will be maintained throughout the season. If the permit holder is unavailable to participate in the test fishery (permit holder cannot be contacted prior to 6:00 PM the day before the test fishery), the vessel will be moved to the bottom of the list and the next vessel on the list will be announced. Additional permit holders may enroll after the initial enrollment and drawing if additional test fish vessels are needed. However, these vessels will be placed at the end of the established list, in the order in which their enrollments are received.

Two chartered vessels will depart Port Moller in the morning of each test fishing day, and the vessel skippers will supply all necessary gear to make four sets at designated locations in the vicinity of Bear River. One vessel will fish north of the river mouth, and the other south of the river mouth. One ADF&G observer will be on board each vessel. The ADF&G will pay \$1,000 per day to charter each vessel. Proceeds from the sale of fish harvested in the ADF&G test fishery will be deposited in the ADF&G test fish fund to cover test fish expenses, including ADF&G personnel and equipment costs for age, length, and sex data collection. Each vessel must meet requirements specified by the ADF&G as stated in the North Alaska Peninsula Sockeye Salmon Test Fishery Operational Plan 2005 (Murphy *in press*), where more specifics about the program can be obtained.

REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 2004. 2004-2007 Bristol Bay, Alaska Peninsula. Atka-Amlia, and Aleutian Islands Areas Commercial Fishing Regulations, 2004 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- Murphy, R.L. *In press*. Alaska Peninsula salmon catch and escapement operational plans, 2005. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report, Kodiak.
- Nelson, P.A., J.J. Hasbrouck, M.J. Witteveen, K.A. Bouwens, and I. Vining. *In press*. Review of Salmon Escapement Goals in the Alaska Peninsula and Aleutian Islands Management Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report, Kodiak.
- Eggers, D.M. 2005. Run Forecasts and Harvest Projections for 2005 Alaska Salmon Fisheries and Review of the 2004 Season. Alaska Department of Fish and Game, Special Publication No. 05-01, Anchorage.

TABLE AND FIGURES

Table 7.-Scheduled North Peninsula fishing periods as described in the 2004-2006 regulation book.

Section	Open Season	Fishing Period
Cinder River, Outside Shagong Lagoon	August 1 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Cinder River, inside Shagong Lagoon	May 1 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Outer Port Heiden	No open season	
Inner Port Heiden	May 1 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Ilnik Section southwest of Unangashak Bluffs (159° 10.25' W long.) excluding Ilnik Lagoon and within the Seal Islands	June 25 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Ilnik Section between Unangashak Bluffs (159°49.45' W long.) Bluffs to Strogonof Point (158° 50.45' W long.).	June 25 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Ilnik Section inside Ilnik Lagoon and within the Seal Islands	May 1 – June 24	12:00 NOON Monday to 11:59 PM Wednesday
Ilnik Section inside Ilnik Lagoon and within the Seal Islands	June 25 - September 30	6:00 AM Monday to 6:00 PM Wednesday
Three Hills	June 25 - June 30	6:00 AM Monday to 6:00 PM Wednesday
Three Hills	July 1 - September 30	6:00 AM Monday to 6:00 PM Thursday
Bear River	May 1 - June 30	6:00 AM Monday to 6:00 PM Wednesday
Bear River	July 1 - September 30	6:00 AM Monday to 6:00 PM Thursday

-continued-

Table 7.-Page 2 of 2.

Section	Open Season	Fishing Period
Port Moller Bight	May 1 - September 30	6:00 AM Monday to 6:00 PM Thursday
Herendeen-Moller Bay	May 1 - July 20	6:00 AM Monday to 6:00 PM Thursday
Nelson Lagoon	May 1 - June 15	6:00 AM Monday to 12:00 MIDNIGHT Wednesday
Nelson Lagoon	June 16 - August 15	6:00 AM Monday to 12:00 MIDNIGHT Thursday
Nelson Lagoon	August 16 - September 30	6:00 AM Monday to 12:00 MIDNIGHT Wednesday
Caribou Flats	No open season	
Black Hills	May 1 - June 30	6:00 AM Monday to 6:00 PM Wednesday
Black Hills	July 1 - September 30	6:00 AM Monday to 6:00 PM Thursday
Izembek-Moffet Bay	June 1 - August 10	6:00 AM Monday to 6:00 PM Thursday
Swanson Lagoon	June 1 - August 10	6:00 AM Monday to 6:00 PM Thursday
Urilia Bay ^a	By Emergency Order Only	6:00 AM Monday to 6:00 PM Thursday
Dublin Bay	July 10 - August 10	6:00 AM Monday to 6:00 PM Thursday
Bechevin Bay	June 1 - September 30	By Emergency Order Only

^a In recent years, the fishing season in the Urilia Bay Section has been delayed until late June to obtain a substantial amount of sockeye salmon escapement before fishing begins. Consequently, in 2005 the Urilia Bay Section will remain closed to commercial salmon fishing until Monday, June 20 unless observed escapements justify an earlier opening.

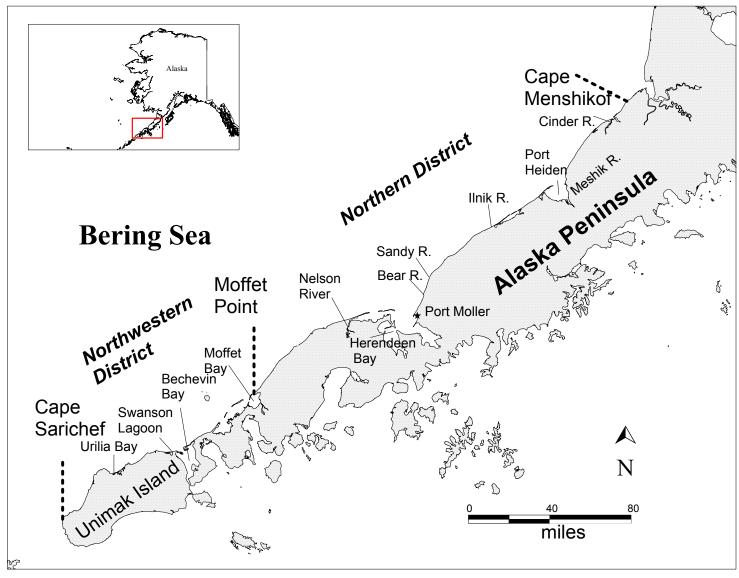


Figure 1.-North and South Alaska Peninsula with North Peninsula commercial salmon fishing districts depicted.

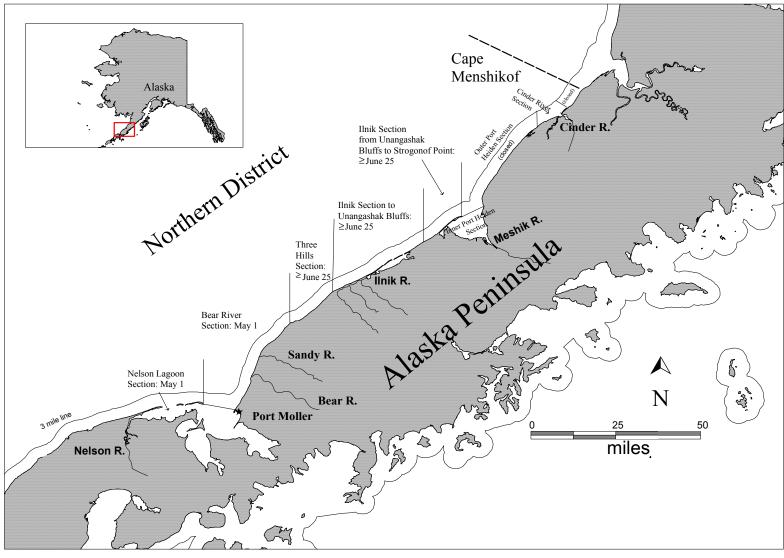


Figure 2.-Nelson Lagoon to Strogonof Point reach, with commercial salmon fishing sections, season opening dates, and major sockeye salmon systems depicted.